

## LINCOLN CITY/LANCASTER COUNTY PLANNING STAFF REPORT

### for September 29, 2004 PLANNING COMMISSION MEETING

**P.A.S.:** Special Permit #04050

**PROPOSAL:** To allow a wireless facility (monopole) up to 105' in height in the B-1 zoning district with a waiver to the fall zone.

**LOCATION:** 5221 South 48<sup>th</sup> Street

**LAND AREA:** The lease area is approximately 290 square feet in area.

**CONCLUSION:** Subject to the conditions of approval, this request complies with the requirements of the Zoning Ordinance and the Comprehensive Plan.

<b><u>RECOMMENDATION:</u></b>	Conditional Approval
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### **GENERAL INFORMATION:**

**LEGAL DESCRIPTION:** Lot 156 I.T. located in the southwest quarter of Section 8, T9N, R7E, 6<sup>th</sup> P.M., Lincoln, Lancaster County, Nebraska.

**EXISTING ZONING:** B-1 Local Business

**EXISTING LAND USE:** Commercial

### **SURROUNDING LAND USE AND ZONING:**

North:	Commercial	B-1
South:	Parking Lot	R-1
East:	Commercial	B-1
West:	Apartments	R-2

### **COMPREHENSIVE PLAN SPECIFICATIONS:**

**Page F25** - The 2025 Comprehensive Plan's Land Use Plan (as amended July, 2003) designates commercial land uses in this area.

**Page F126** - Wireless Telecommunications - The placement and construction of such facilities need to occur in a way that is compatible with the natural and built environment. Taller, more intensive facilities should be located in commercial and industrial areas. Facilities in residential areas should be unobtrusive, of a scale

consistent with the neighborhood setting, and sited in a way that does not detract from the enjoyment of the neighborhood by its residents.

**HISTORY: January 20, 1993** - Special Permit #1454 was approved allowing an 80' tall broadcast tower for radio signal relay.

**BACKGROUND:**

The existing facility is a lattice tower originally designed to provide signal relay service for local radio stations. Seeking enhanced wireless coverage in the area, US Cellular investigated extending the tower to 100' for collocation. However, the structural analysis showed the tower could not accommodate it. This request proposes removing the 80' lattice tower on the adjacent lot (Lot 155), and replacing it with a 105' tall monopole (100' tall tower with a 5' lightening rod) that can accommodate up to three carriers.

The proposed tower is to be located between two commercial buildings, where the north building is located on Lot 155 I.T. and the south building is located on Lot 156 I.T. The original tower was located at the southwest corner of Lot 155. This request is seeking to site the new tower on Lot 155, in a location that is approximately 20' east of and 30' south of the old one. The lease area compound abuts the property line between Lots 155 and 156. While there is no side yard setback in the B-1 district, a fall zone equivalent to one-half the height of the tower is applicable. The proposed location maintains the required separation for the fall zone from the west property line to the apartments, but not to the north property line. A waiver to the fall zone is requested and can be granted by the Planning Commission. The owner of both lots is aware of this waiver request.

**ANALYSIS:**

**STANDARDS FOR EVALUATION:**

**Conformity with Comprehensive Plan.**

1. The Comprehensive Plan designates commercial land uses in this area. The Comprehensive Plan also notes that towers accommodating wireless facilities are part of the infrastructure that supports emerging wireless technologies, and are consistent with the goal of ensuring the community is served by information technology. This application is consistent with the Plan and sites the facility in a manner that is compatible with surrounding uses.

**Preference of site location in accordance with Section 27.68.080.**

2. There are three location preferences as follows:

A. Preferred Location Sites:

(1) Publicly owned sites on which personal wireless facilities can be unobtrusively located with due regard to visibility, aesthetic issues, traffic flow, public safety, health and welfare. Such sites may include locating on existing buildings, co-locating on existing towers, screened roof-top mounts, water towers, billboards, electric substations, or other camouflaged sites, but shall not include new towers.

(2) Privately owned sites with existing structures on which personal wireless facilities can be unobtrusively located with due regard to visibility, aesthetic issues, traffic flow, public safety, health and welfare. Such sites may include locating on existing buildings, co-locating on existing towers, screened rooftop mounts, water towers, billboards, electric substations, or other camouflaged sites, but shall not include new towers.

(3) Publicly owned sites in which the facility is minimally obtrusive, has a minimal impact on the surrounding area, is an appropriate distance from residential land uses, has minimal impact on residential uses, with due regard being given to the scale of the facility and the surrounding area and the impact on the location.

(4) Sites in commercially or industrially zoned districts in which the facility is minimally obtrusive, has a minimal impact on the surrounding area, is an appropriate distance from residential land uses, has minimal impact on residential uses, with due regard being given to the scale of the facility and the surrounding area and the impact on the location.

B. Limited Preference Sites, in order of priority:

(1) Sites on other public property.

(2) Sites on other commercially or industrially zoned property.

(3) Screened antennas on multi-family residential structures exceeding 30' in height.

(4) Camouflaged structures with minimal impact on residential land uses.

C. Sensitive Location Sites. Sites located in areas with residential uses, environmentally sensitive areas, Capitol View Corridors, the Capitol Environs District, entryway corridors, downtown, landmarks or landmark districts, properties listed or eligible to be listed on the National Register of Historic Places, the Airport Environs, and other sensitive areas. The applications for personal wireless facilities which are located at sensitive sites will be required to demonstrate a technical need to locate a personal wireless facility at a sensitive site and that other reasonable alternatives do not exist for the facility at a location which is not a sensitive site.

This site is located in the B-1 Local Business district. It is developed with commercial uses and is considered a limited preference location.

**Compatibility with abutting property and land uses.**

3. Adjacent buildings to the north and south are commercial and the impact of the replacement tower upon them is not significant. The proposed tower has been moved approximately 20' further to the east compared to the location of the existing tower. This maintains the required fall zone from the west property line, and increases the separation between the tower and the apartments to the west.

As the lease area is on the property line, it does not maintain the required fall zone to the north. Because the buildings are located so close together, the only location on the property that could maintain the fall zone in all directions would be in the parking lot to the south. However, a tower located there would be more visible. Given that this request is a replacement for the original tower in approximately the same location, and it is sited between two buildings along with other mechanical appurtenances, the impact of the waiver to the fall zone is negligible and is appropriate.

**Adverse impacts such as visual, environmental or noise impacts.**

4. Even though the proposed tower is 25' higher than the existing one, it is still of a height and scale that is appropriate for the zoning district and surrounding land uses. The plans show flush-mounted antennas to minimize the silhouette of the facility and help reduce the visual impact of the facility upon the apartments to the west.

**Availability of suitable existing structures for antenna mounting.**

5. The applicant attempted to collocate on the existing lattice tower, but it was not capable of being extended to accommodate additional wireless antennas at 100'. The only other facility of comparable height in the vicinity are the L.E.S. power transmission line structures along Highway 2, and collocation on them is not feasible.

**Scale of facility in relation to surrounding land uses.**

6. The proposed tower is located in the B-1 district where the allowed uses are generally compatible with a 105' tall wireless facility. Compatibility of scale is provided by siting the facility between two commercial buildings, and by proximity to the L.E.S. power transmission line that extends along Highway 2 in this area. The existing tower is relatively unobtrusive and does not stand out, and the replacement using a 105' tall monopole should not significantly change this.

**Impact on views/vistas and impact on landmark structures/districts, historically significant structures/districts, architecturally significant structures, landmark vistas or scenery and view corridors from visually obtrusive antennas and back-up equipment.**

7. There is no significant impact noted.

**Color and finish.**

8. The tower will have a galvanized finish as required by the Zoning Ordinance.

**Ability to collocate.**

9. The proposed tower is designed to accommodate up to three carriers.

**Screening potential of existing vegetation, structures and topographic features, and screening potential of proposed facilities, ground level equipment, buildings and tower base.**

10. A landscape plan was not provided with the application. The Design Standards require screening, which when provided will help buffer the tower from the apartments to the west. The site plan will have to be revised to show required landscaping.

**Evidence of good faith efforts, and demonstration that a preferred or limited preference site was not technically, legally, or economically feasible.**

11. This wireless application is considered a limited preference site, and the elimination of other preferred or limited preference site is not required by the Zoning Ordinance.

**CONDITIONS:**

Site Specific:

1. This approval permits a 105' tall monopole for wireless facilities capable of accommodating the antennas of three carriers with a waiver to the fall zone consistent with the revised site plan.

General:

2. Before receiving building permits:

- 2.1 The permittee shall complete the following instructions and submit the documents and plans to the Planning Department for review and approval.
  - 2.1.1 A revised site plan including 5 copies showing the following revisions:
    - 2.1.1.1 Identify Lots 155 and 156, and show all lot lines with dimensions.
    - 2.1.1.2 Remove the notes relating to setbacks for the B-1 district.
    - 2.1.1.3 A signed surveyor's certificate.
    - 2.1.1.4 Show required landscaping in compliance with the City of Lincoln Design Standards.
    - 2.1.1.5 Add a note stating that all antennas shall be flush-mounted arrays.
    - 2.1.1.6 Clearly show adequately-sized lease areas for ground equipment for two additional carriers.
- 2.2 The construction plans comply with the approved plans.
- 2.3 The owner of Lot 155 must submit a letter withdrawing Special Permit #1454.
- 2.4 Submit a surety adequate to guarantee removal of the wireless facility subject to approval by the City.

Standard:

3. The following conditions are applicable to all requests:
  - 3.1 Before use of the facility all development and construction shall have been completed in compliance with the approved plans.
  - 3.2 All privately-owned improvements shall be permanently maintained by the owner.
  - 3.3 The site plan accompanying this permit shall be the basis for all interpretations of setbacks, yards, locations of buildings, location of parking and circulation elements, and similar matters.

- 3.4 This resolution's terms, conditions, and requirements bind and obligate the permittee, its successors and assigns.
- 3.5 The applicant shall sign and return the letter of acceptance to the County Clerk within 30 days following the approval of the special permit, provided, however, said 30-day period may be extended up to six months by administrative amendment. The clerk shall file a copy of the resolution approving the special permit and the letter of acceptance with the Register of Deeds, filling fees therefor to be paid in advance by the applicant.

Prepared by:

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Brian Will, 441-6362, [bwill@lincoln.ne.gov](mailto:bwill@lincoln.ne.gov)  
Planner  
September 15, 2004

**CONTACT:** Douglas Rogers  
LCC International  
1023 Lincoln Mall  
Lincoln, NE 68508  
(402) 434-9307

**APPLICANT:** US Cellular Wireless Communications  
3601 109<sup>th</sup> Street  
Urbandale, IA 50322  
(515) 210-1010

**OWNER:** Sutter Place Properties  
2401 Wilderness Ridge Drive  
Lincoln, NE 68512  
(402) 432-3383



## Special Permit #04050 S. 48th St. & Hwy. #2

2002 aerial

### Zoning:

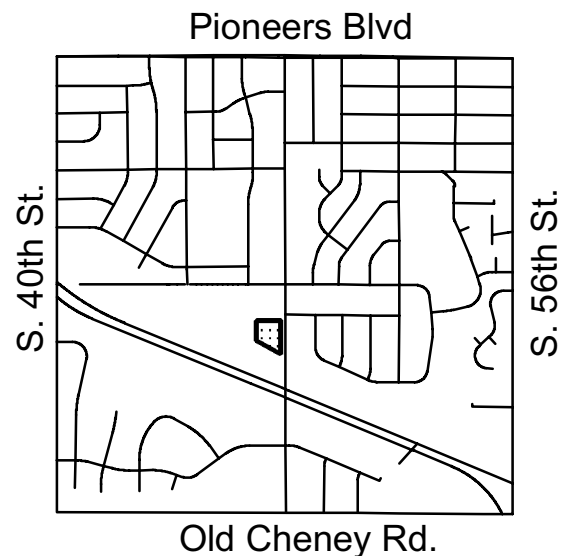
R-1 to R-8	Residential District
AG	Agricultural District
AGR	Agricultural Residential District
R-C	Residential Conservation District
O-1	Office District
O-2	Suburban Office District
O-3	Office Park District
R-T	Residential Transition District
B-1	Local Business District
B-2	Planned Neighborhood Business District
B-3	Commercial District
B-4	Lincoln Center Business District
B-5	Planned Regional Business District
H-1	Interstate Commercial District
H-2	Highway Business District
H-3	Highway Commercial District
H-4	General Commercial District
I-1	Industrial District
I-2	Industrial Park District
I-3	Employment Center District
P	Public Use District

One Square Mile  
Sec. 8 T9N R7E



Zoning Jurisdiction Lines

City Limit Jurisdiction



Lincoln City - Lancaster County Planning Dept.



**LEGAL DESCRIPTION PARENT PARCEL**

Lot One Hundred Fifty-Five (155) & One Hundred Fifty-Six (156), Irregular Tracts in the Southwest Quarter (SW 1/4) of Section Eight (8), Township Nine (9) North, Range Seven (7) East of the 6th Principal Meridian, Lincoln, Lancaster County, Nebraska, more commonly referred to as S221 & 48th St., Lincoln, Nebraska.

**LEGAL DESCRIPTION BUILDING LEASE SITE**

A tract of land located in Lots One Hundred Fifty-Five (155) & One Hundred Fifty-Six (156), Irregular Tracts in the Southwest Quarter (SW 1/4) of Section Eight (8), Township Nine (9) North, Range Seven (7) East of the 6th Principal Meridian, Lincoln, Lancaster County, Nebraska being more particularly described as follows:

Commencing at the Northwest corner of Lot 156, thence S 88°59'13" E a distance of 79.50 feet; thence S 00°01'11" W a distance of 9.45 feet to the Point of Beginning of said Building Lease Site; thence continuing S 00°01'11" W a distance of 14.35 feet; thence N 90°00'00" W a distance of 20.00 feet; thence N 00°01'11" E a distance of 14.35 feet; thence S 90°00'00" E a distance of 20.00 feet to the Point of Beginning, containing 287.2 square feet, more or less.

**LEGAL DESCRIPTION TOWER LEASE SITE**

A tract of land located in Lots One Hundred Fifty-Five (155) & One Hundred Fifty-Six (156), Irregular Tracts in the Southwest Quarter (SW 1/4) of Section Eight (8), Township Nine (9) North, Range Seven (7) East of the 6th Principal Meridian, Lincoln, Lancaster County, Nebraska being more particularly described as follows:

Commencing at the Northwest corner of lot 156, thence S 88°59'13" E a distance of 54.48 feet; to the Point of Beginning of said Tower Lease Site; thence continuing S 88°59'13" E a distance of 54.48 feet; to the Point of Beginning of said Tower Lease Site; thence N 88°59'13" E a distance of 10.00 feet; thence S 00°05'21" E a distance of 8.57 feet to the Point of Beginning, containing 95.5 square feet, more or less.

**LEGAL DESCRIPTION ACCESS EASEMENT**

An access easement over and across those parcels described above, said easement being twelve feet in width, six feet either side of the line described as follows:

Commencing at the Northwest corner of said Tower Lease Site, thence S 00°05'21" W a distance of 3.57 feet to the Point of Beginning of said access easement; thence N 88°59'13" W a distance of 40.69 feet; thence S 03°04'07" W a distance of 28.37 feet; thence S 15°20'11" E a distance of 115.63 feet; thence S 61°53'45" E a distance of 285.99 feet to the Point of Termination.

**SURVEY NOTES**

1. Site Bench Mark: Northwest Corner of Proposed Tower Lease Site - NAVD 83 EL. 1223.60'-NAVD 88
2. Bench Mark: SQ in Light pole base in the North side of Highway 2, 2nd Pole W of 48th St. EL. 1221.66'-NAVD 88
3. Base of Bearings: Being N 00°37'44" E, between the SW corner of said Lot 156, I.T., a rnd. 3/4" Pipe and the NE corner of said Lot 156, I.T., a rnd. 3/4" Pipe.
4. All bearings shown are grid bearings based on Nebraska State Plane Coordinate System.
5. All horizontal datum is in NAD 83 and all vertical datum is in NAVD 88.
6. Subject property opportunity falls within the confines of a "Zone X" as determined by the FEMA-FIA Flood Rate Map 31108C03196, County of Lancaster, Nebraska revised 08/21/2001.

**VICINITY MAP**

Shows location relative to 48th St, 50th St, 52nd St, and Hwy 2.

**TOWER LEASE SITE & BUILDING LEASE DETAIL**

Scale 1" = 10'

ZONING: ZONE B-1 FLIGHT 10' SETBACKS NEAR 20' SIDE 5'

**LEGEND**

- PLAT DISTANCE
- ALTA DISTANCE
- DEED DISTANCE
- RECORD DISTANCE
- SET CORNER
- UNSUBDIVIDED ELECTRICAL
- PROPERTY LINE
- BENCH MARK
- ELECTRIC METER
- ELECTRIC POST
- PUMP POLE
- TELEPHONE POLE
- TELEPHONE MANHOLE
- TELEPHONE WARNING SIGN

**ASSOCIATED ENGINEERING AND SURVEYING**

1022 High Street, Suite 3  
Lincoln, NE 68502  
Phone (402) 441-5281  
Fax (402) 441-5281  
O.L.S. PROJ. #128

**SURVEYOR'S CERTIFICATE**

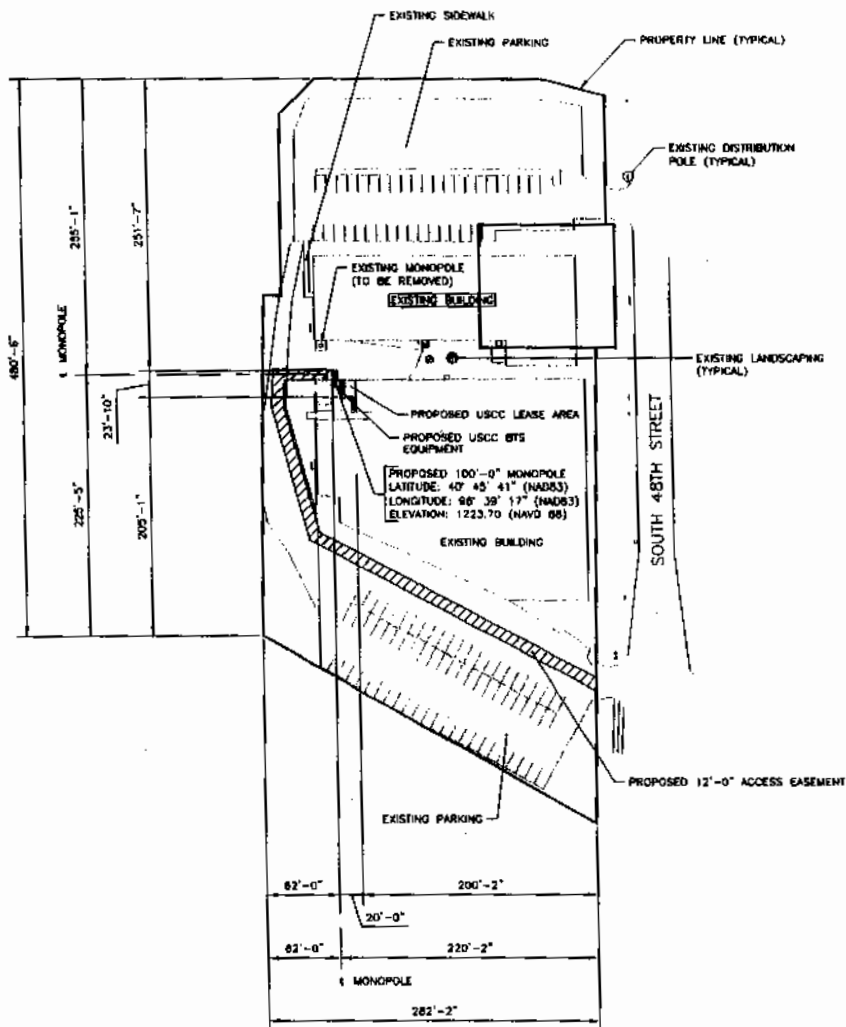
I hereby certify that this land surveying document was prepared and the related survey work was performed by me or under my direct personal supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Nebraska.

Dennis P. Sullivan License #562  
Date \_\_\_\_\_

**GRAPHIC SCALE**



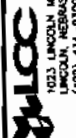
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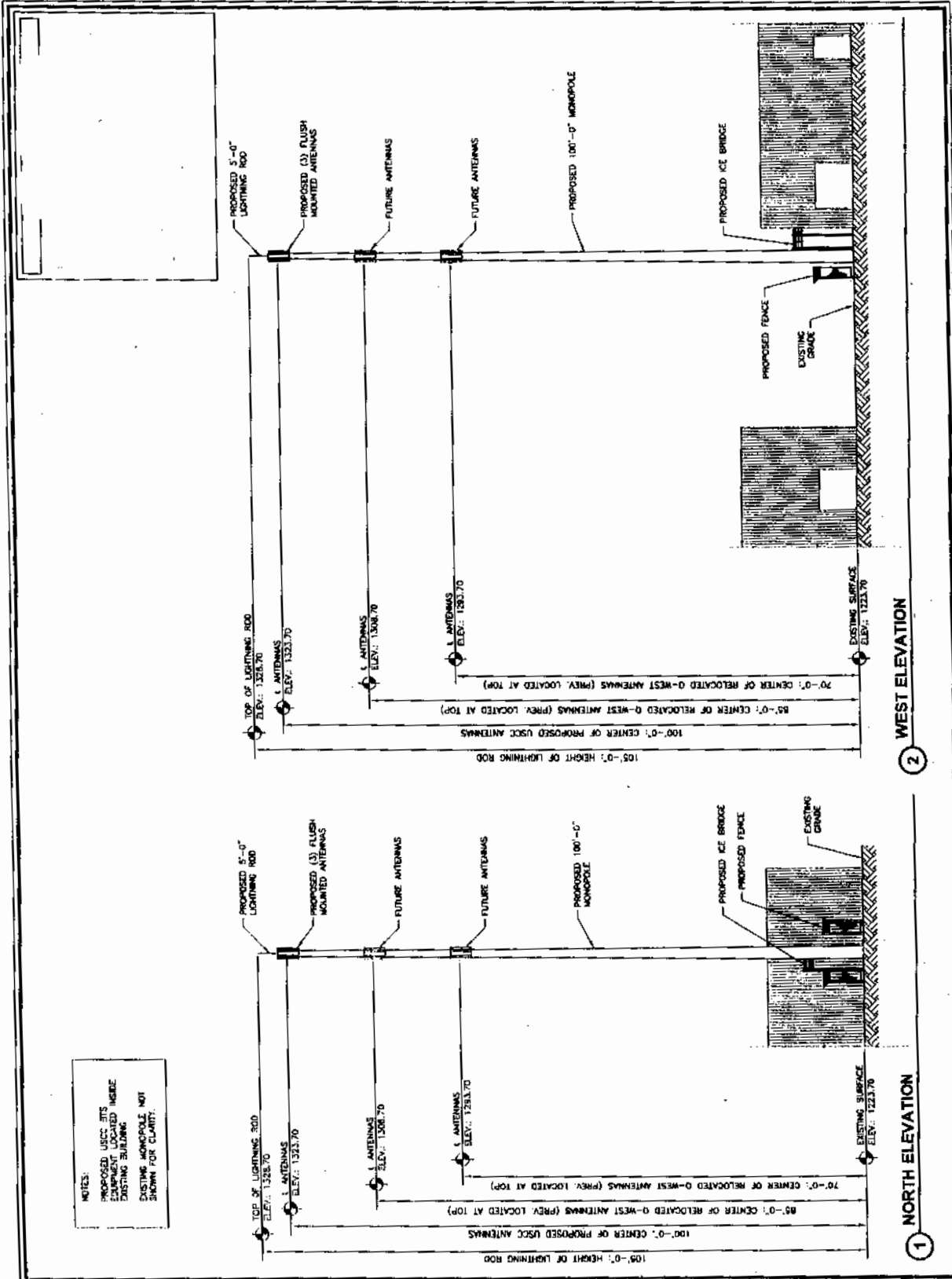
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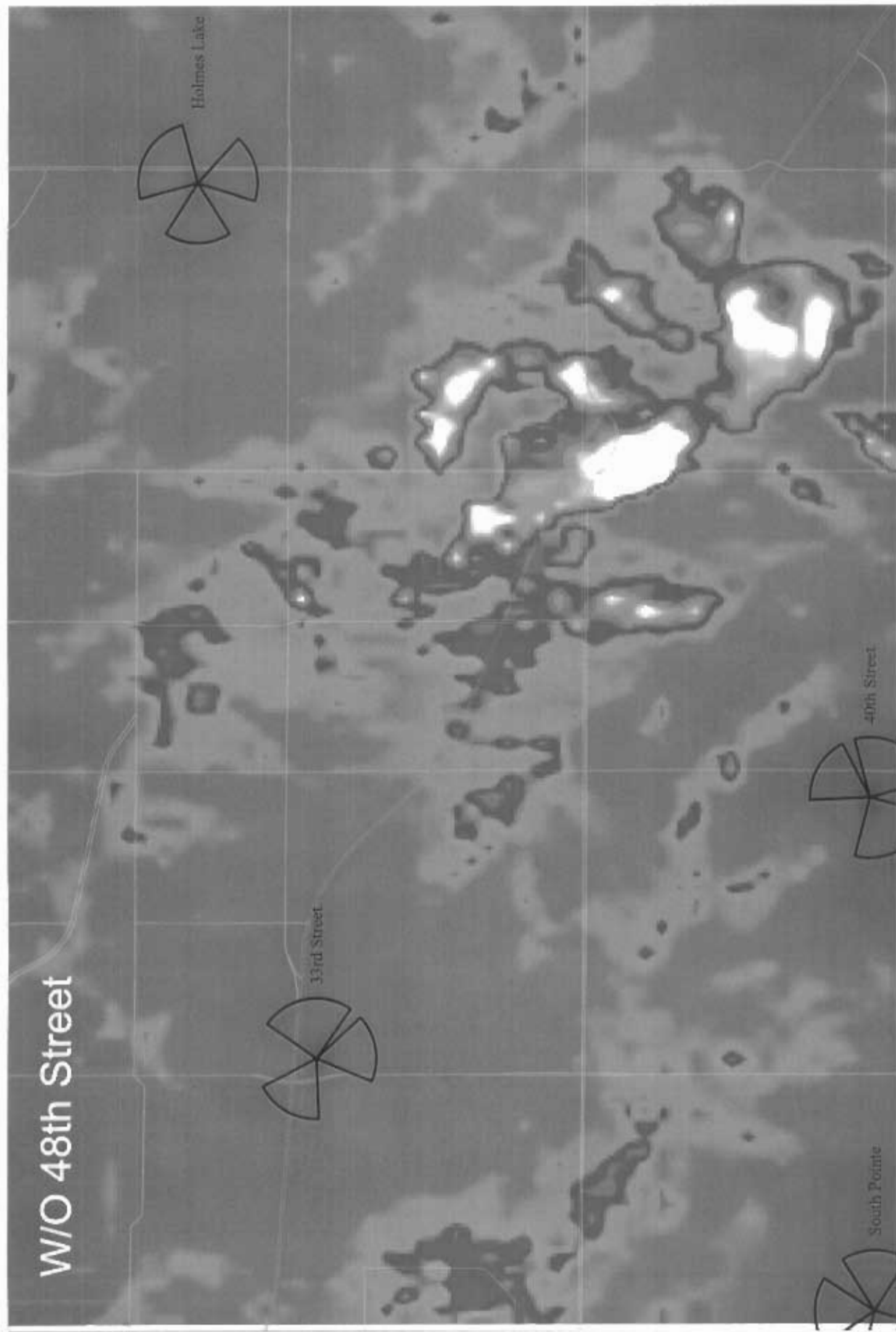


1 OVERALL SITE PLAN

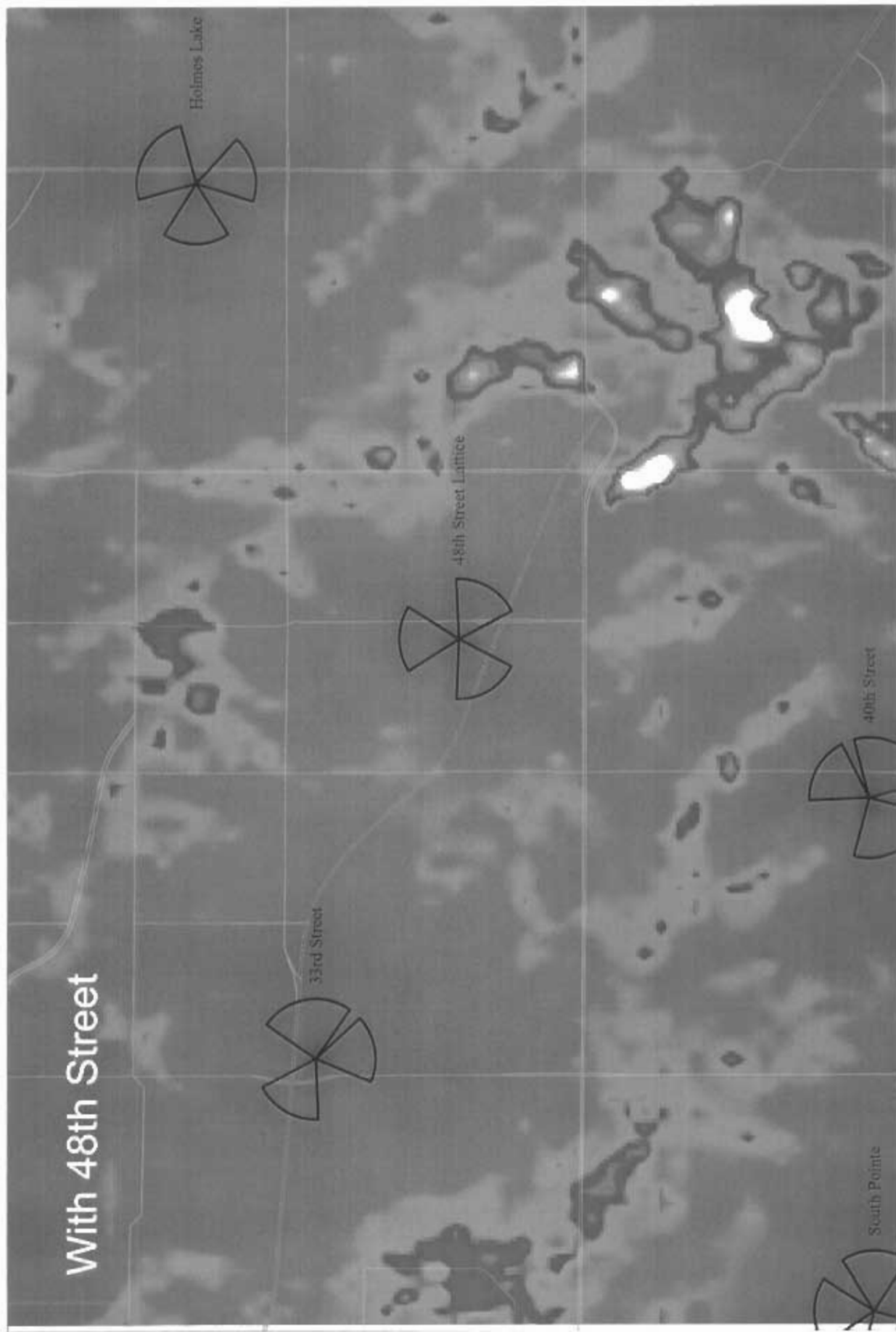
PROJECT NUMBER: 8713012		SHEET NUMBER: C-1		SHEET TOTAL: 0	
OVERALL SITE PLAN					
SUBMITTALS:					
DATE	DESCRIPTION	REV.			
08/31/04	POD ZONING DMS.	0			
CURRENT ISSUE DATE: 08/31/04					
SITE NUMBER: 8713012					
OLD CHENEY ROAD					
SITE NAME:					
OWNER:					
CONSTRUCTION:					
APPROVALS:					
DATE	NAME	TYPE			
08/31/04	DAK	BY			
USCC					
1801 JENSON AVE. LINCOLN, NEBRASKA 68508 (402) 334-8300					
CLIENT:					
US Cellular					
137 NORTH MAIN STREET LINCOLN, NE 68502 PHONE: (402) 208-5040 FAX: (402) 208-5045					
APPLICANT/OWNER:					
ASSOCIATED ENGINEERING, PC 137 NORTH MAIN STREET LINCOLN, NE 68502 PHONE: (402) 208-5040 FAX: (402) 208-5045					

 <b>ASSOCIATED ENGINEERING, PC</b> 157 NORTH MAIN STREET ELKHORN, NE 68022 PHONE: (402) 289-5040 FAX: (402) 289-5045	 <b>US Cellular</b> WIRELESS COMMUNICATIONS 10000 N. 100TH STREET SUITE 100 OVERLAND PARK, KS 66210	 <b>ALOC</b> 1033 LINCOLN WAY LINCOLN, NE 68505 (402) 434-8300	DRAWN BY: CHM BT: JAV BT:		APPROVALS:		SITE NO.:		ZONING:		R.F.:		CONSTRUCTION:		OWNER:		SITE NAME:		OLD CHENEY ROAD		SITE NUMBER:		871330.2		CURRENT ISSUE DATE:		08/31/04		SUBMITTALS:		DATE:		DESCRIPTION:		REV:		08/31/04		006 ZONING DWGS. D		SHEET TITLE:		NORTH & WEST ELEVATIONS		SHEET NUMBER:		A-1		0		PROJECT NUMBER:		871330.2	
			APPLICANT/OWNER:		PROJECT:																																																	





COVERAGE MAP



Coverage Map

With 48th Street @ 100'

Holmes Lake

48th Street Lattice

33rd Street

40th Street

South Pointe

Covered Road





August 31, 2004

Mr. Brian Will  
Planner  
City of Lincoln-Planning Dept.  
555 South 10<sup>th</sup> Street/Suite213  
Lincoln, NE 68508

Dear Mr. Will:

LCC International is contracted by US Cellular to do a wireless network build out for their Lincoln, Nebraska market. This statement letter is in regard to our application to replace an existing tower at 5221 S 48<sup>th</sup> Street.

The existing tower was originally erected in 1993 for a local radio station and is 80' in height. In order to accomplish the coverage objectives and complete their coverage footprint in Lincoln, US Cellular needs to have a minimum antenna height of 100'. I contacted the manufacturer of the existing tower and had them look at the feasibility of extending the tower to 100'. Valmont Industries replied with a finding that the current tower would not be able to structurally hold the extension.

We are proposing to install a 100' monopole with flush mounted antennas. The monopole will have a 5' lightning rod to bring the overall height to 105'. The design of the new monopole will be engineered to accommodate a total of 3 carriers, US Cellular and 2 additional.

The cellular equipment at the ground level will be installed inside of the adjacent building, and there is additional space for future carriers. See attached site plans for details.

The existing tower will be removed upon completion of the new tower.

We respectfully ask the City of Lincoln to review and approve this application for US Cellular's new monopole tower.

Thank you for your time and consideration in this matter.

Sincerely,

  
Douglas Rogers  
LCC International

1023 Lincoln Mall Road  
Lincoln, Nebraska 68508

